

**Notice of Allowability****Application No.**

09/520,538

**Examiner**

Delia M. Ramirez

**Applicant(s)**

WISE ET AL.

**Art Unit**

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/16/2004.
2. ☒ The allowed claim(s) is/are 27-29.
3. ☒ The drawings filed on 23 May 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

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## **DETAILED ACTION**

### ***Status of the Application***

Claims 27-29 are pending.

Amendment of claims 27-28 in a communication filed on 3/16/2004 is acknowledged.

### ***Reasons for Allowance***

1. The following is an Examiner's statement of reasons for allowance. Although the prior art discloses a method for generating a *Pseudomonas* DmpR effector specificity mutant by chemical mutagenesis, wherein said mutant has a single mutation in the DmpR sensor domain (amino terminal A domain), and wherein said mutant exhibits increased transcriptional activation of a reporter gene in the presence of 4-methylphenol, 3,4-dimethylphenol, 4-ethylphenol, while maintaining a wild-type like response to phenol, 2-methylphenol and 3-methylphenol (Pavel et al., J. Bacteriol. 176(24):7550-7557, 1994; cited in previous Office Actions), the Examiner has found no teaching or suggestion in the prior art directed to a method for enhancing transcriptional activation of a reporter gene under the control of a promoter regulated by a DmpR protein, wherein said protein contains a sensor domain, and wherein said sensor domain is mutated such that the enhancement in transcriptional activation is triggered by the presence of phenol, 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4-dimethylphenol, 4-nitrophenol or 2-nitrophenol. Therefore, claims 27-29 directed to (1) a method for enhancing transcriptional activation of a reporter gene under the control of a promoter regulated by a DmpR protein, wherein said DmpR protein contains a sensor domain, in *E. coli* or *Pseudomonas*, wherein said sensor domain is mutated via mutagenic PCR such that the enhancement in transcriptional activation occurs in response to the presence of phenol, 2-chlorophenol, 2,4-dichlorophenol, 4-chloro-3-methylphenol, 2,4-dimethylphenol, 4-nitrophenol or 2-nitrophenol, (2) the method of (1) wherein the PCR reaction is carried

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out with the primers set forth in SEQ ID NO: 16-17, or (3) the method of 1 wherein the transcriptional activation is enhanced by at least 4-fold, are allowable over the prior art of record.

2. Claims 27-29 are allowed.


3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delia M. Ramirez whose telephone number is (571) 272-0938. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy can be reached on (571) 272-0928. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.

Delia M. Ramirez, Ph.D.  
Patent Examiner  
Art Unit 1652

DR  
April 8, 2004

  
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